Expanding Boundaries:
Systems Thinking for the Built Environment

Workshop 13 June 2016

SUSTAINABLE HYBRID BUILDING

A MULTIDISCIPLINARY APPROACH TO MIX-USED BUILDINGS IN SMALL URBAN DISTRICTS

CONTENT

Increasing urban density requirements is important to sustainable growth. The demand for high density together with the demand of maintain the diversity of services, retails, cultural facilities, social mix raise the questions whether mono-functional public buildings are still adequate to provide resilient sustainable solutions for the city of tomorrow. A hybrid building is a building that combines several programs in one fabric. It could be managed by public-private partnerships (e.g. school + retail + fitness + housing) and could be accessible 24h/24.

The workshop will discuss the design of small-medium size hybrid buildings as one of the possible responses to shortage of housing land, to reduce transport carbon dioxide (CO2) and energy consumption in urban area, to preserve resources and to reduce operating costs. Mixed-used, hybrid buildings foster integrated approaches to energy and resource efficiency. Their sustainability depends on the degree of interaction among the different building programs they host. This means to think about new spatial strategies, about distribution spaces as social key to communal lives of occupants, about how to design a sustainable and energy efficient building section and to think in which way the building could have an active role in the energy system.

AIM

Participants will be introduced to hybrid building design. The main objective is to identify and define synergies among buildings programs that can improve the sustainability of the building: reduced energy consumption, preservation of the natural resources, social cohesion are some of the issues that will be discussed.

WORKSHOP PROGRAM

The one-day workshop will be held on June 13, 2016.

Morning session (4 h): Theoretical framework for hybrid building design: history, *typology*, sustainable building sections, urban and building energy systems, open areas and/or public space "at ground level," social challenges.

Afternoon session (4 h): Design of a hybrid building (within a given framework), concept *sketches* and design strategies for sustainable solutions. Participants will work in groups.

Visit (1 h)*:* visit to a hybrid building in Zurich (to be confirmed)

MIN - MAX AMOUNT OF PARTICIPANTS

min 10 / max 15 participants

TARGETED PARTICIPANTS

Architects, Urban designers, Building physicists, Decision makers, but also participants from other sectors are kindly welcome (at least half of the participants should be architects).

Participants are required to bring their own laptop. Architects and urban designers to have also a working copy of Archicad or Autocad or another design software.

WORKSHOP ORGANISERS

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